ABSTRACT

An image coding method is utilized to provide high quality images without error accumulation. Such an image coding method comprises estimating motion vectors between an input image to be coded and a reference image; synthesizing a prediction image of the input image using the motion vectors and the reference image; generating a difference image by calculating a difference between the input image and the prediction image; and outputting coded information of the input image including information related to the difference image and the motion vectors. The prediction image is synthesized by calculating intensity values at points where no pixels actually exist in the reference image by interpolation. Such an interpolation is performed according to information specifying a positive rounding method or a negative rounding method when the current frame is a P frame, and using a predetermined rounding method which is a positive rounding method or a negative rounding method when the current frame is a B frame.